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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,542	03/01/2004	Robert Paul Siegel	D/3	9690

7590 10/29/2004
Robert P. Siegel
52 Woodside Drive
Penfield, NY 14526

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/790,542	Applicant(s) SIEGEL, ROBERT PAUL	
	Examiner Stephen Gravini	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20040301</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9-16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Melink et al. (US 6,170,480). Melink is considered to disclose the claimed invention comprising:

a sheet metal collecting hood **34**, vented to the outdoors **26**;

a variable speed, electronically controllable fan **50 & 70** , mounted in such a way as to draw air from a cooking area and out through said vent of said collecting hood;

a plurality of air quality sensors **76 & 82** capable of detecting both comfort factors and the presence of hazardous substances in the air;

a controller **72** that is programmed with an algorithm that responds to the presence of air quality factors by adjusting the speed of said variable speed fan according to a computed ventilation requirement (please see column 8 lines 8-20 for the controller program function); or alternatively:

a vent **30** connected to said range hood **34** and vented to the outdoors **26**;

a variable speed fan **50 & 70** connected to said vent;

a plurality of air quality sensors **76 & 82**; and

a micro-controller, said micro-controller being adapted to process signals from said plurality of air quality sensors and determine the appropriate speed of said variable speed fan based on levels of predetermined air quality constituents detected by said air quality sensors (please see column 8 lines 8-20 for the micro-controller function wherein the disclosed controller is considered to anticipate the claimed micro-controller because both are used to process sensor signals to vary fan speed); or alternatively:

a collecting hood **34**;

a variable speed fan **50 & 70**;

a series of sensors **76 & 82** adapted to sense predetermined hazardous elements;

a controller **72** adapted to integrate signals from said series of sensors, derive a ventilating requirement from them, and with said ventilating requirement drive said variable speed fan in accordance with said ventilating requirement (please see column 8 lines 8-20 for the controller integration function). Melink is also considered to disclose the claimed air quality sensors include sensors for temperature, humidity, carbon monoxide and smoke, an audible alarm that is activated if the detected level of hazardous substances remains at a pre-established threshold (column 17 lines 50-53), a mounted display **138** panel that indicates the status of each hazardous substance (column 17 line 51), an override control which allows a user to turn said variable speed fan ON to a desired level manually (column 12 lines 54-61), to shut said variable speed fan OFF and wherein said air quality sensors are mounted to sample both the air stream drawn into said range hood through forced convection, as well as, the ambient air in the

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surrounding living space (column 11 lines 1-67), a display adapted to indicate the presence of each of said particular hazardous elements (column 9 lines 62-67), and a variable speed fan is mounted exterior to the structure being ventilated (column 5 lines 31-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5-8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melink in view of Has (US 5,386,099). Melink is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed fuzzy logic control algorithm. Has, another range-type ventilation system, is considered to disclose a fuzzy logic control algorithm at column 4 lines 23-63. It would have been obvious to one skilled in the art to combine the teachings of Melink with the fuzzy logic control algorithm, considered to be disclosed by Has, for the purpose of providing an

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appropriate ventilation flow speed based on parameters sensed in the ventilation flow path.

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office." This publication is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C-F, cited in this action, are considered to disclose range-type ventilation systems sensing parameters to vary blower speed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308 7570. The examiner can normally be reached on normal weekday business hours (east coast time).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Smg October 27, 2004

Stephen M. Gami